

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus comprising:

an O-ring structure having at least two internally disposed struts, each strut ~~connectively~~ extending to a centrally disposed sphere retainer, the struts having an upper surface and a lower surface; and

~~a sphere-shaped retaining insert connectively~~ said sphere retainer formed so that it is connected to said struts, and wherein a lower portion of said sphere retainer extends below the lower surface of the struts.

2. (Currently Amended) The apparatus of claim 1, further comprising:

a structure having a recess for supporting and containing the O-ring, the recess having a spherical hole disposed on its center for removeably inserting said lower portion of said sphere retainer ~~the sphere-shaped retainer of the O-ring~~.

3. (Previously Presented) The apparatus of claim 1, wherein the O-ring is molded using an elastomeric polymer material that is compatible with a substrate to be supported.

4. (Previously Presented) The apparatus of claim 1, wherein the O-ring is used for supporting substrates during high speed handling and processing of the substrates.

5. (Previously Presented) The apparatus of claim 1, wherein the O-ring retains a supporting substrate by its frictional properties.

6. (Previously Presented) The apparatus of claim 1, wherein the recess has a dovetailed edge, and the dovetailed edge combined with the spherical hole prevents an O-ring from lifting with the substrate caused by stiction properties of elastomeric materials.

7. (Previously Presented) The apparatus of claim 1, wherein the upper surface of each strut is horizontally disposed below an upper surface of the O-ring.

8. (Cancelled)

9. (Currently Amended) An apparatus comprising:
an O-ring structure having an upper surface and having at least two internally disposed struts, each strut ~~connectively~~ extending to a centrally disposed sphere retainer, each strut having an upper surface and a lower surface, wherein the upper surface of each strut is formed below the upper surface of the O-ring; and

~~a sphere-shaped retaining insert is connectively~~ said sphere retainer is formed so that it is connected to said struts, and wherein a lower portion of said sphere retainer extends below the lower surface of the struts.

10. (Previously Presented) The apparatus of claim 2, wherein the recess has a vent hole disposed therein, the vent hole being disposed between the spherical hole and the inside surface of the recess.

11. (Previously Presented) The apparatus of claim 9, wherein the O-ring is molded using an elastomeric polymer material that is compatible with a supported wafer.

12. (Previously Presented) The apparatus of claim 9, wherein the O-ring is adapted for supporting semiconductor wafers during high speed handling and processing of the wafers.

13. (Previously Presented) The apparatus of claim 9, wherein the O-ring is adapted to retain a supporting wafer by its frictional properties.

14. (Currently Amended) The apparatus of claim 9, wherein ~~the sphere-shaped~~ said sphere retainer in combination with the struts prevents the O-ring from lifting upwards with the wafer, and the lifting is caused by stiction properties of an elastomeric material.

15. – 16. (Cancelled)

17. (Withdrawn – Currently Amended) A method for retaining the O-ring structure according to claim 1 ~~pad for supporting semiconductor wafers~~, comprising the steps of:
providing a robot with a wafer-handling paddle;

providing a the wafer-handling paddle with a plurality of circular recesses, each circular recess contains and supports the an O-ring structure pad, the circular recesses having a dovetailed periphery and a spherical hole disposed on its center, and a vent hole radially disposed halfway between the spherical hole and the inside surface of the circular recess[.];

providing the an O-ring structure; and ~~pad having at least two internally disposed struts connectively extended to a centrally disposed sphere-shaped retainer, the struts having an upper and a lower surface;~~

~~the top surfaces of the struts are formed below top surfaces of the O-ring pad.~~

~~the sphere-shaped retainer is connectively formed below the bottom surfaces of the struts;~~

placing the O-ring structure pad on each of the circular recesses while conforming the O-ring structure it to the dovetailed periphery and removeably urging the sphere-shaped retainer into the spherical hole.

18. (Withdrawn – Currently Amended) The method of claim 17 wherein the O-ring structures pads are molded using an elastomeric polymer material that is compatible with a supported wafer.

19. (Withdrawn – Currently Amended) The method of claim 17 wherein the O-ring structure pad is used for supporting semiconductor wafers during high speed handling and processing of the wafers.

20. (Withdrawn – Currently Amended) The method of claim 17 wherein the O-ring structure pad retains a supporting wafer by its frictional properties.

21. (Withdrawn – Currently Amended) The method of claim 17 wherein the sphere-shaped retainer in combination with the struts prevents ~~an~~ the O-ring structure ~~pad~~ from lifting upwards with the wafer, the lifting being ~~is~~ caused by stiction properties of an elastomeric material.

22. (Withdrawn) The method of claim 21, wherein a conventional O-ring stuck to the bottom of a wafer may be carried into a high temperature process chamber thus contaminating the process environment.

23. (Withdrawn – Currently Amended) The method of claim 17 wherein the ~~self~~ clutching O-ring structure ~~pad~~ reduces processor downtime caused by contamination and substrate breakage resulting from a missing O-ring support.

24. (Withdrawn – Currently Amended) The method of claim 17 wherein utilization of the ~~self-clutching~~ O-ring structure ~~pad~~ is highly reliable and more serviceable equipment solution.

25. (Currently Amended) An apparatus comprising:
an O-ring structure having an upper surface, a lower surface and a central axis, the upper surface configured to releasably support a substrate;
a transfer paddle having a recess wall defining a recess, the recess configured to receive the O-ring structure;

at least two struts disposed internally on the O-ring structure, each strut connected to the central axis of the O-ring structure, each strut having an upper surface and a lower surface; and

a sphere retainer ~~-shaped retaining insert~~ centrally disposed within the O-ring structure and connected to each of said struts, so that a lower portion of said sphere retainer extends below the lower surface of each strut.

26. (Previously Presented) The apparatus of claim 25, wherein the upper surface of each strut is horizontally disposed below the upper surface of the O-ring structure.

27. (Previously Presented) The apparatus of claim 25, wherein the recess of the transfer paddle has a spherical shape for supporting and containing the O-ring structure.

28. (Previously Presented) The apparatus of claim 25, wherein the recess wall of the transfer paddle is configured with a dovetailed edge for preventing the O-ring structure from lifting with a substrate during a transfer of the substrate from the apparatus to a substrate transport device.

29. (Currently Amended) The apparatus of claim 25, wherein the recess of the transfer paddle has a spherical hole centrally disposed therein, the spherical hole configured for the removable insertion of ~~the sphere-shaped retaining insert~~ said lower portion of said sphere retainer of the O-ring structure.

30. (Previously Presented) The apparatus of claim 29, wherein the recess of the transfer paddle has a vent hole disposed therein, the vent hole being disposed between the spherical hole and the recess wall.

31. (Previously Presented) The apparatus of claim 25, wherein the O-ring structure is made of an elastomeric polymer material that is compatible with a substrate to be supported.

32. (Previously Presented) The apparatus of claim 25, wherein the O-ring structure is adapted to retain a supported substrate by its frictional properties.